AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated hereafter.

The following is a copy of Applicant's claims that identifies language being added with underlining ("___") and language being deleted with strikethrough ("——") or placed in double brackets ("[[ ]]"), as applicable:

1.   (Original) A device for realizing disaster recovery of soft-switch based on a packet network,

comprising at least two core control devices located in different places which provide control service for their respective access equipments;

wherein each of said core control devices further includes the following units used for disaster recovery:

a process unit, a database unit, a share unit, a synchronization process unit;

said process unit and database unit are independent of a processor and a database already existing within each ofthe core control devices, and are specifically for serving remote access equipments, thereby making the core control devices in different places be of mutual disaster recovery relation;

said share unit is used for sharing processing ability and data; and

said synchronization process unit is used for synchronizing data between the core control devices of mutual disaster recovery.

2.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim 1, wherein

data in the database unit serving remote access equipments comes fiom the database in the remote one ofthe core control devices, and is realized by the synchronization process unit within the core control devices of mutual disaster recovery;

Modification of configure data in anyone of said core control devices will trigger the synchronization process unit to synchronize data to the other core control device of mutual disaster recovery; and

anyone of said core control devices can also take initiative to request for, via the synchronization process unit, related configuration data from the other core control device of mutual disaster recovery.

3.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim 1, wherein

in said share unit, the processing ability shared is mainly network processing ability, the data shared includes local basic environment parameters, a distribution table and distribution situation of the access equipments;

said distribution table is used to make routing decision for requests submitted to the core control devices, deciding whether the requests should be handed over to the existing processor or the process unit;

the current distribution situation of said access equipments not only includes distribution situation ofthe access equipments with local core device as master control, but also includes the distribution situation ofthe access equipments with remote core device as master control. If one of the access equipments registers to or unregisters from the local core control device, no matter whether it is the access equipment with the local core device as master control or not, its current distribution should be recorded, and be synchronized to the remote core control device of mutual disaster recovery via the synchronization process unit, so as to guarantee that this access equipment can be accessed by other equipments.

4.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim I, wherein

data transmission between devices of mutual disaster recovery implemented by said synchronization process unit is generally established on a TCP connection which is maintained during the whole running period of system, so as to guarantee the reliable and prompt synchronization of data via IP network.

5.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim 4, wherein
at the beginning of establishing the mutual disaster recovery relation or when the data will be re-synchronized, a vast amount of configuration data will be synchronized. Efficiency of data transmission and network utilization can be improved by first generating a data file in the local core control device, then transmitting the data file to the remote one via FTP protocol, and then extracting the date fiom the data file in the remote.

6.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim 1, wherein

daily maintenance and management of said core control devices themselves are performed independently. Added, deleted and modified configuration data in one core control device should be synchronized to the other core control device of mutual disaster recovery, so that when there is failure occurring in one of the core control devices, disaster recovery handoff can be performed promptly.

7.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim 1, wherein

failure occurring in said core control devices is detected by the access equipments for which the core control devices provide service, that is, the access equipments should be able to take the initiative to detect whether the core control devices are available through a protocol hand-shake mechanism, and be able to automatically hand over to the preset backup core control device of mutual disaster recovery after detecting the unavailability of the core control device.

8.   (Original) The device for realizing disaster recovery of soft-switch based on packet network of claim 1, wherein

said core control devices and access equipments which are controlled and served by said core control devices locate in a packet switch network;

said core control device supports the disaster recovery handoff of part of the access equipments, that is, in the case that one of the core control devices of mutual disaster recovery operates normally, the other core control device can take over part or all of its access equipments.

9.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim 1, wherein

between the core control devices of mutual disaster recovery, registration distribution situation of the access equipments is synchronized in real time; said core control devices decide, according to the distribution of the access equipments, whether access request to the local access equipments should be performed locally or forwarded to the remote core control device, or whether access to remote access equipments should be forwarded to the remote or performed locally.

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10.   (Original) The device for realizing disaster recovery of soft-switch based on a packet network of claim 1, wherein

after a broken-down core control device restores operation, handoff of the local access equipments registering on the remote core control devices back to local is implemented by the remote one of mutual disaster recovery according to a preset disaster restore strategy.